

O'Hare Modernization Program

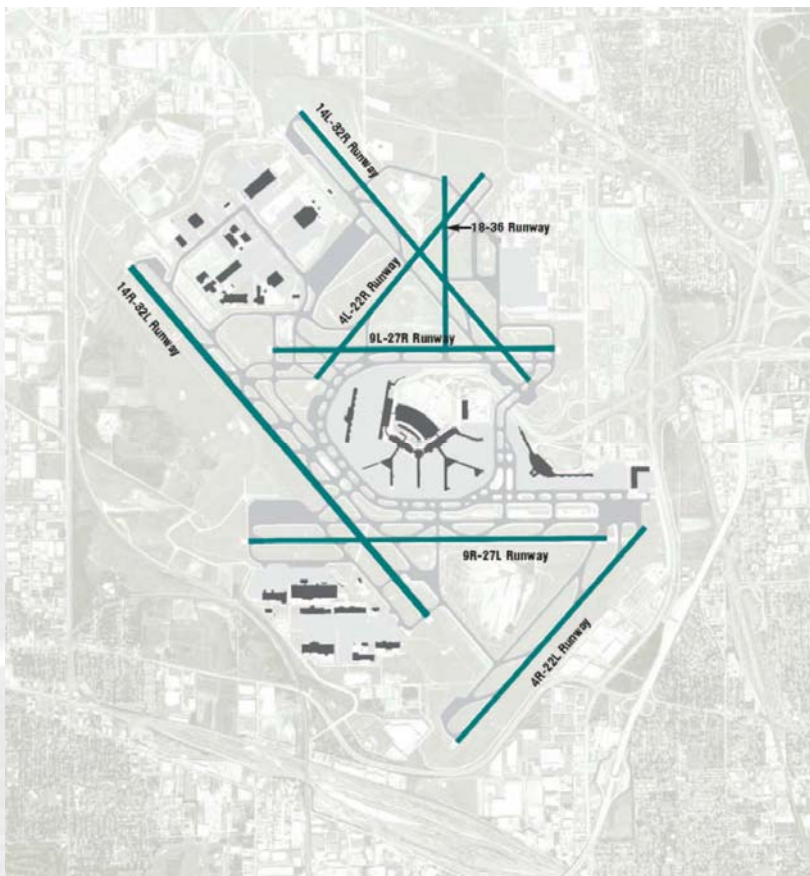
Panel Discussion-

“Tools for Cleaning up Illinois Diesel: Technology, Funding and Collaboration”

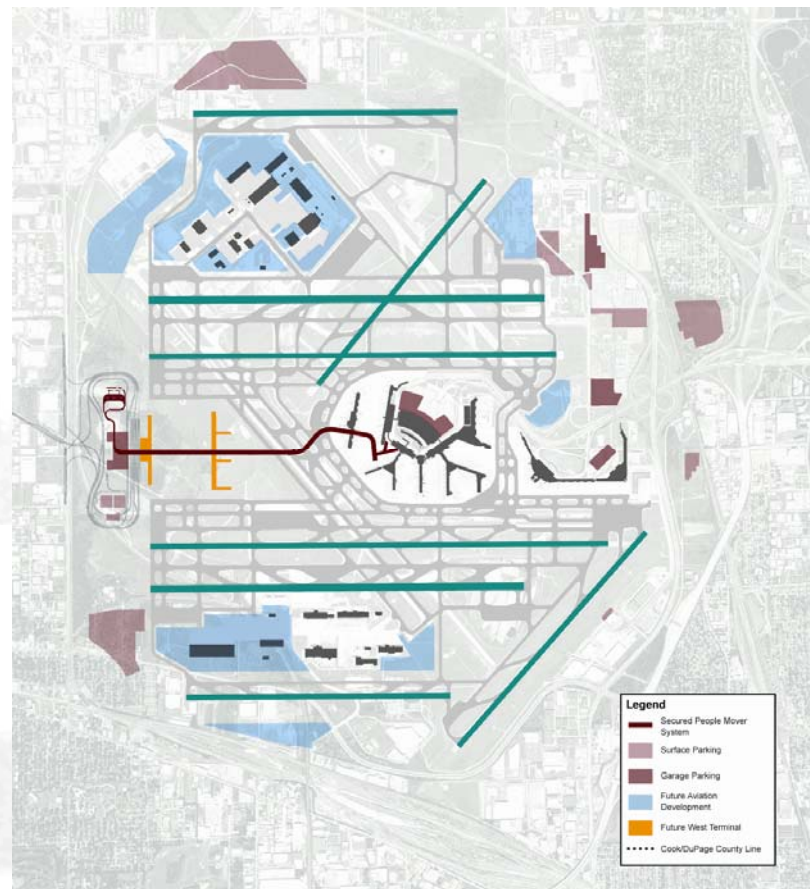
***Rosemarie S. Andolino
Executive Director***

O'Hare International Airport

Existing Airfield



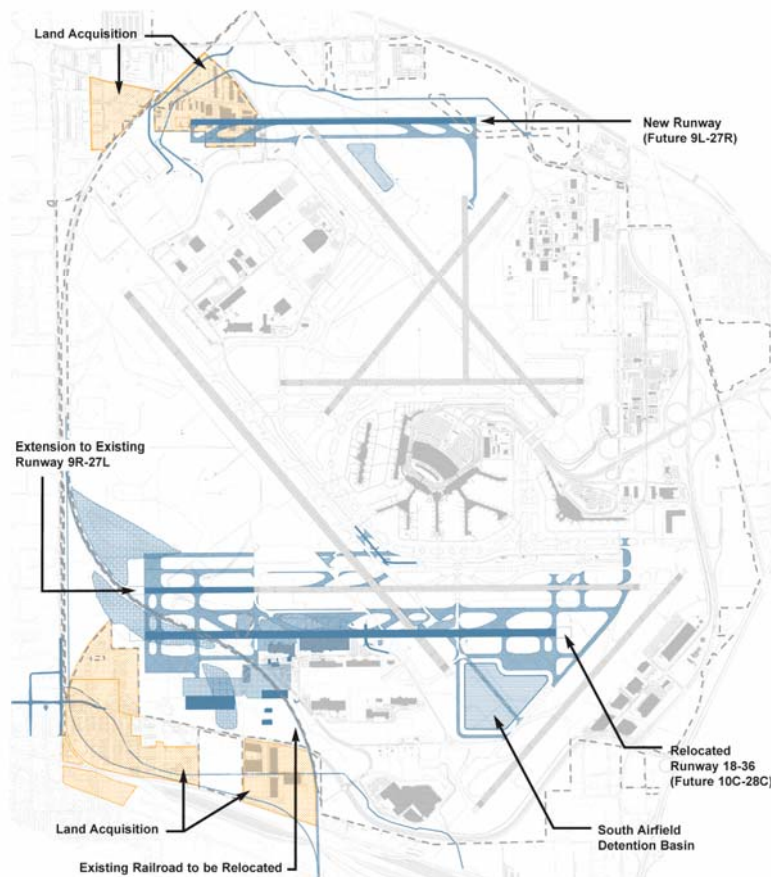
Future Airfield



O'Hare Modernization Program Benefits

- **Reduces delays and increases capacity**
- **Creates up to 195,000 jobs and adds \$18 billion in economic activity annually**
- **Saves \$750 million in reduced delays annually**
- **Ensures O'Hare remains the most important economic generator for our region**

Phase 1 Projects: Funded and Under Construction

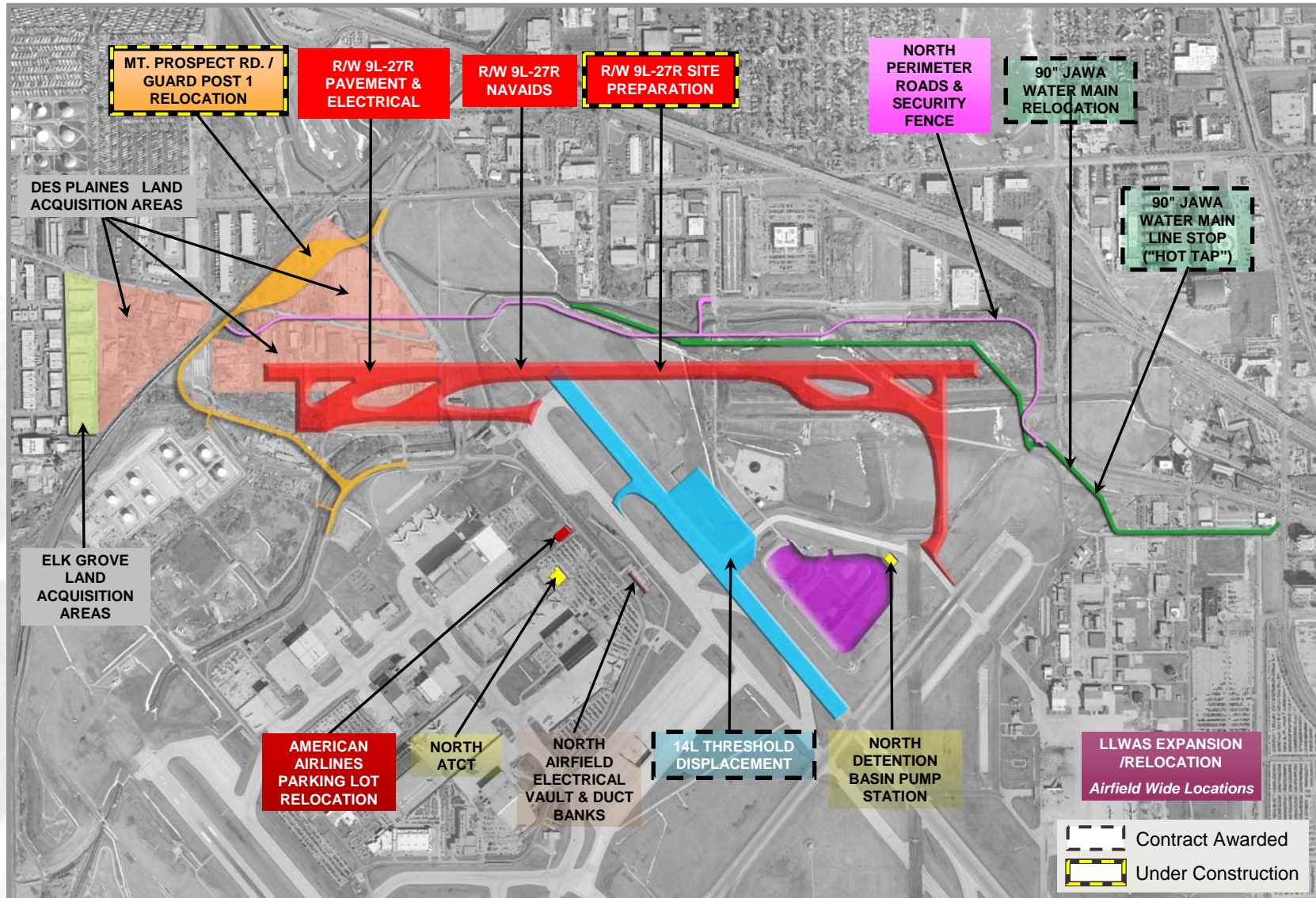


- Planning, environmental studies and preliminary engineering
- Runway 9L-27R
- Runway 10L extension
- Runway 10C-28C
- Land acquisition and wetlands mitigation
- Union Pacific Railroad Relocation
- South Airfield Detention Basin
- Other enabling projects
- Equals 65% of airfield work

OMP Construction is Underway!



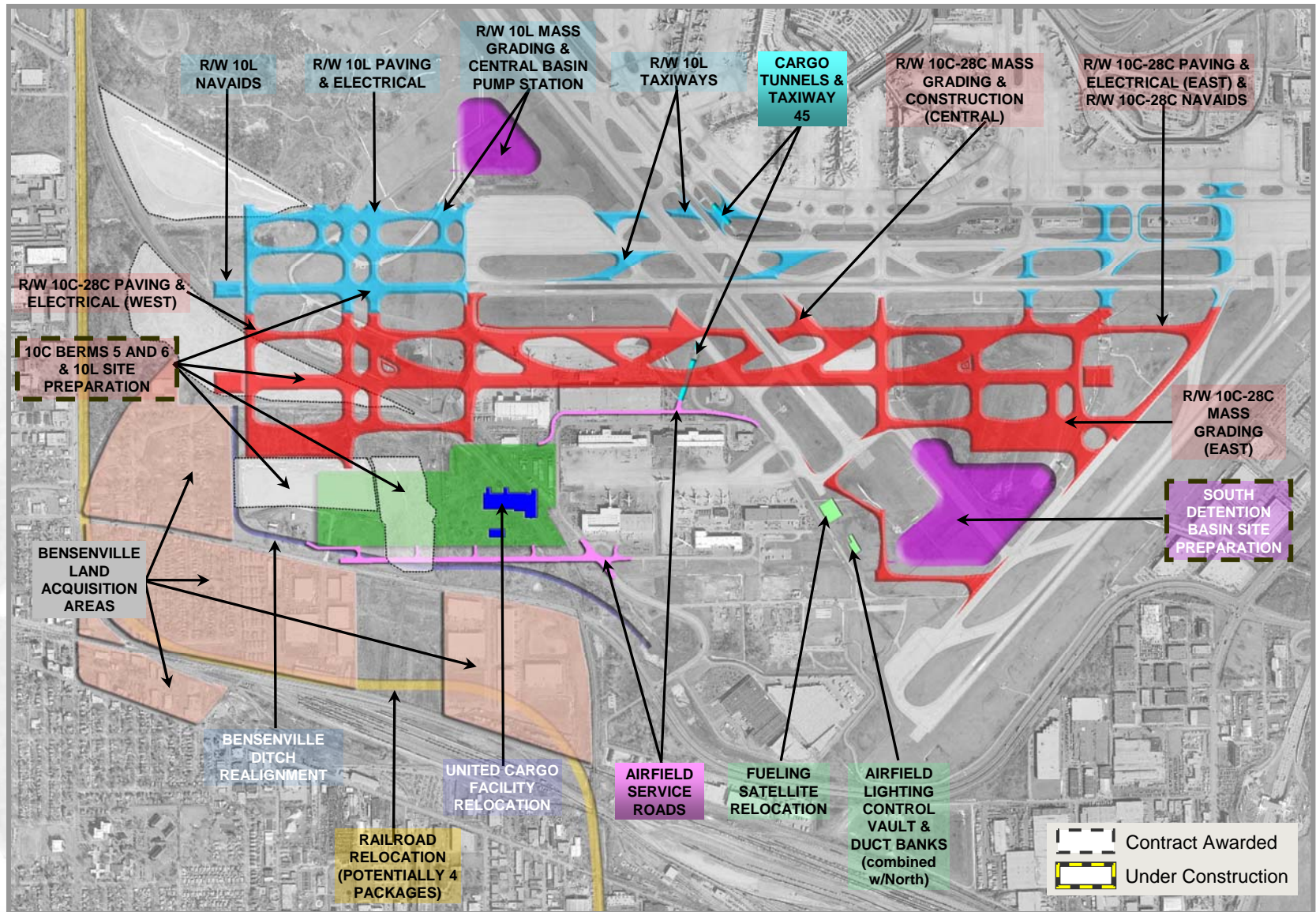
North Airfield Project Layout



OMP Construction South Airfield Photos



South Airfield Project Layout



www.OhareModernization.org

Disclaimer – Any and all information contained herein is subject to change without notice

OMP's Commitment to "Green Initiatives"



- OMP's Sustainable Design Manual modeled after USGBC LEED rating system
- Ultra Low Sulfur Diesel Fuel required for on- and off-road construction vehicles > 50 hp
- Retrofit older equipment with particulate traps and oxidation catalysts
- 90 percent recycle rate on demolition materials
- Mandate that trucks leave the site covered
- Restrict idling of construction vehicles

Construction Air Quality Specifications

Diesel Vehicle
Emission Controls
and use of ULSD
fuel are Required
as part of the
O'Hare
Modernization
Program
Specifications

CONSTRUCTION AIR QUALITY – DIESEL VEHICLE EMISSIONS CONTROLS SECTION 01111

PART 1 GENERAL

1.01 DESCRIPTION

- A. The O'Hare Modernization Program (OMP) developed a "Sustainable Design Manual" (SDM) as an integral part of the overall design and construction standards for the OMP. (City of Chicago, O'Hare Modernization Program, Sustainable Design Manual. O'Hare Modernization Program. December 2003 can be found at www.oharemodernization.org, see "OMP Public Information".) Its vision states that "O'Hare International Airport will continue to evolve as a benchmark for environmental stewardship in design and construction. The OMP will embrace the best possible environmental, social, and fiscally responsible practices to enhance the quality of life and maintain consistency with the overall mission and goals of the City of Chicago."
- B. Section 8.5 of the OMP SDM, "Clean Fuel Construction Vehicles", includes consideration of requiring "...that a portion of the construction vehicle fleet be clean fuel vehicles and/or incorporate clean air technologies."
- C. The specifications herein meet and exceed the scope of Section 8.5 of the OMP SDM and will benefit the Chicagoland region by providing meaningful reductions in air emissions associated with OMP construction activity.

PART 2 PRODUCTS

2.01 FUEL USE REQUIREMENTS

- A. The fuel use requirements apply to all off-road vehicles and equipment utilized by Contractors, Subcontractors and Suppliers that are on the project site for a minimum period of fourteen (14) consecutive calendar days.
- B. The fuel use requirements apply to all on-road vehicles and equipment utilized by Contractors, Subcontractors and Suppliers that transport materials regularly to and from the Project site that exceed five (5) calendar days per month accessing the work site.
- C. The contractor must utilize Ultra Low Sulfur Diesel (ULSD) for all diesel-powered vehicles and equipment (both mobile and stationary) with engine HP ratings of 50 HP or more that are utilized on the Project site. It should be noted that ULSD fuel is readily available in the Chicagoland area. Also, it should be noted that the requirements stated herein are

NORTH AIRFIELD
RUNWAY 8L-27R
SITE PREPARATION
PROJECT NUMBER: OH6126.200.50.023

CONSTRUCTION AIR QUALITY – DIESEL VEHICLE EMISSIONS CONTROLS
ISSUED FOR BID 01111-1

Tracking Compliance

- ➡ Various tracking and reporting mechanisms have been developed for construction currently underway for the OMP.
- ➡ For example: Contractor/Subcontractor Equipment Verification Reports, Equipment Tracking Forms, and Monthly Usage Summary Reports are Completed.

Construction Equipment Tier Compliance

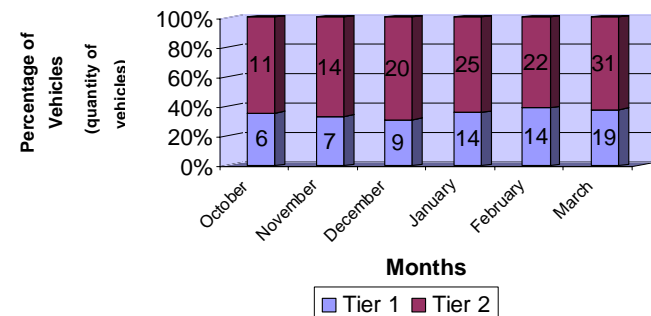
Approximately 38 percent of the equipment being used is the older Tier 1 equipment, retrofitted primarily with oxidation catalysts.

Oxidation catalysts can achieve a reduction of up to 90% in carbon monoxide (CO) and hydrocarbons (HC) emissions, and a 20-30% reduction in particulate matter (PM) emissions.

It is expected that as the program progresses contractors will continue to opt for the newest equipment, including the newer Tier 3 and ultimately Tier 4 equipment as it becomes available.

Construction Equipment Summary

 (October through March)



Tier 1 equipment with an oxidation catalyst



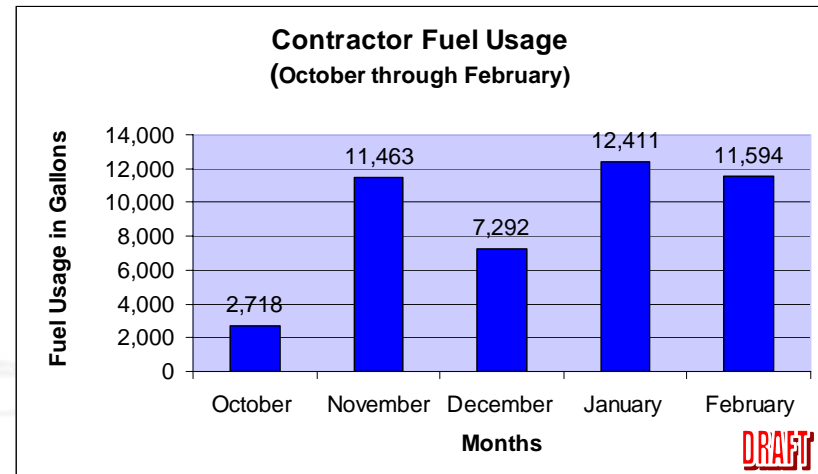
Construction Equipment Fuel Usage

OMP is tracking the use of Ultra Low Sulfur Diesel (ULSD) fuel.

The use of ULSD is occurring four years in advance of federal mandates for off-road diesel vehicles.

Equipment greater than 50 HP is required to use ULSD fuel.

Fuel usage is expected to grow exponentially as the program progresses.



ULSD Fuel Station

Significant OMP Sustainable Design Initiatives



- **Recommending green roof for base building of new FAA control tower (would be among the first airports in the country to do so)**



Elevating runway ends to store excess dirt on site (reduces truck trips and emissions)



Designed 6,400 sq. ft. vegetated roof atop canopy of new guard post

OMP Creates New Wetlands Throughout Region



- ➔ OMP replaces 153 acres of low quality wetlands with more than 400 acres of higher quality wetlands throughout Des Plaines River Watershed
- ➔ OMP will provide more than \$40 million to regional entities to create and maintain wetlands at no cost to state or local taxpayers

Thank you!



Rosemarie S. Andolino
Executive Director

Please visit

www.OhareModernization.org to:

-- View the OMP Sustainable Design Manual

-- Sign up for the “OMP Web Alerts” to receive the latest news on the Program

Remember- the sooner we complete construction, the sooner the region will realize the tremendous benefits of a modernized O'Hare!

www.OhareModernization.org